CONCORDIA UNIVERSITY

Department of Economics
(S.G.W. Campus)

Economics 425/2 Section AA

Mathematical Economics I

Fall: 1985

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This course intends to introduce the student to several topics of mathematical economics. Special emphasis will be given to the properties of linear models and their role in economic theory and practice.

Students are expected to be familiar with the contents of the courses in mathematics for Economists C325 and C326.

The mark of the course will be based on several problem sets which will be handed out during the term (worth 20% of the mark), one mid-term examination (35%) and a final examination (45%). The dates of the examinations will be set later.

The textbooks for the course are Mathematical Optimization by M. Intriligator (I), and Linear Programming and Economic Analysis (II) by Dorfman, Samuelson and Solow (DSS) (Optional).

Course Outline:

- Static Optimization - Linear and Non-Linear.

1, 2, 3, 4 Also B: ch 7, 8. Chg. Ch 9-12, Ch 19-21

- Linear Programming - Duality.

15, DSS 2, 3, 4-1 to 4-8, 5, 6, 7 . B: ch 5,6 ; Chg. Ch 19, 20

- Input Output Analysis - Static.

19.2, DSS 9, 10 . B. Ch 12 Chg. Ch. 5.7

- The Dynamic Leontief System. DSS 11.

- Activity Analysis. (References to be given later). B Ch 23 , Chg. Ch 20

- Linear Programming and the Theory of General Equilibrium DSS 13.

Baumol: Economic Theory and Operations Analysis
Chiang: Fundamental Methods of Mathematical Economics.